



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Greg Denton
TDEC-WPC
6th Floor, L & C Tower Annex
401 Church Street
Nashville, TN 37243-1534

Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002618
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: K00002618001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA ash spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 07/16/2009 10:00
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 07/26/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.81 pH Units
Chlorine, residual:
Conductivity: 142 uMHO
Temperature: 26.21
Dissolved Oxygen: 7.21 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	41	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	34	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002618002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA ash spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 07/16/2009 10:55
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 07/26/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.65 pH Units
Chlorine, residual:
Conductivity: 120 uMHO
Temperature: 28.02
Dissolved Oxygen: 7.39 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	31	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	33	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	16	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002618003

Project Name: TVA-Ash Spill

Sample Description: approx 100' downstream from middle dredge po

Sampler Project Name: TVA ash spill

Project Site No.: 2A

Station No.: Dredge Plume

Date/Time Collected: 07/16/2009 11:08

Sampler's Name: Geoff Klein

County: ROANE - 73

Sample Matrix: Water

EFO: Knoxville

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date: 07/26/2009

Date/Time Received: 07/16/2009 14:12

Received By: Ken Hitchman

Field Determinations

pH: 7.58 pH Units

Chlorine, residual:

Conductivity: 143 uMHO

Temperature: 27.03

Dissolved Oxygen: 7.04 mg/L

Other:

Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	88	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	77	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	19	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002618004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA ash spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 07/16/2009 11:18
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 07/26/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.54 pH Units
Chlorine, residual:
Conductivity: 137 uMHO
Temperature: 26.98
Dissolved Oxygen: 7.02 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	81	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	68	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	16	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002618005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA ash spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 07/16/2009 11:29
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 07/26/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 8.58 pH Units
Chlorine, residual:
Conductivity: 239 uMHO
Temperature: 26.89
Dissolved Oxygen: 10.49 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	110	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	85	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	19	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002618006
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA ash spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 07/16/2009 11:40
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 07/26/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 8.76 pH Units
Chlorine, residual:
Conductivity: 253 uMHO
Temperature: 26.90
Dissolved Oxygen: 11.47 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	110	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	85	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	22	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002618007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA ash spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 07/16/2009 11:54
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 07/26/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 8.39 pH Units
Chlorine, residual:
Conductivity: 263 uMHO
Temperature: 27.22
Dissolved Oxygen: 9.61 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	87	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	69	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002618008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA ash spill
Project Site No.: 5A
Station No.: KingAshOutFf2
Date/Time Collected: 07/16/2009 12:01
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 07/26/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.91 pH Units
Chlorine, residual:
Conductivity: 242 uMHO
Temperature: 27.23
Dissolved Oxygen: 7.48 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	78	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	68	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	18	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number:	K00002618009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	8.36 pH Units
Sample Description:	Cilinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	264 uMHO
Project Site No.:	6	Temperature:	26.70
Station No.:	CLINC004.5RO	Dissolved Oxygen:	9.51 mg/L
Date/Time Collected:	07/16/2009 12:13	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:	07/26/2009		
Date/Time Received:	07/16/2009 14:12		
Received By:	Ken Hitchman		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	100	mg/L	3.8	10	M Chen	7/23/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	87	mg/L	0.7	1	M Chen	7/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/17/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/17/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected



**STATE OF TENNESSEE
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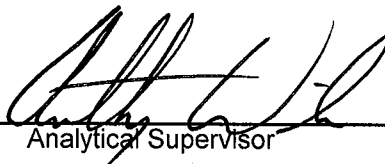
Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002618
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: K00002618001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA ash spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 07/16/2009 10:00
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.81 pH Units
Chlorine, residual:
Conductivity: 142 uMHO
Temperature: 26.21
Dissolved Oxygen: 7.21 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	350	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	170	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	41	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	2.1J	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.33J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	3.7	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	1.0	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	96	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.5	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	0.037J	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.19J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	6.2	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number: K00002618001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA ash spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 07/16/2009 10:00
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations

pH: 7.81 pH Units
Chlorine, residual:
Conductivity: 142 uMHO
Temperature: 26.21
Dissolved Oxygen: 7.21 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.087J	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002618002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA ash spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 07/16/2009 10:55
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.65 pH Units
Chlorine, residual:
Conductivity: 120 uMHO
Temperature: 28.02
Dissolved Oxygen: 7.39 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	230	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	310	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	0.33J	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	5.9	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	50	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	0.15J	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.51J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	2.8	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.67J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	70	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.5	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	0.034J	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	1.4	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	9.1	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number: K00002618002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA ash spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 07/16/2009 10:55
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.65 pH Units
Chlorine, residual:
Conductivity: 120 uMHO
Temperature: 28.02
Dissolved Oxygen: 7.39 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number:	K00002618003	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.58 pH Units
Sample Description:	approx 100' downstream from middle dredge po	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	143 uMHO
Project Site No.:	2A	Temperature:	27.03
Station No.:	Dredge Plume	Dissolved Oxygen:	7.04 mg/L
Date/Time Collected:	07/16/2009 11:08	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:	08/01/2009		
Date/Time Received:	07/16/2009 14:12		
Received By:	Ken Hitchman		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	280	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	390	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	3.7J	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	52	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.51J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	1.8	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.85J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	71	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.7	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.47J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	4.7J	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	3.9J	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number:	K00002618003	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.58 pH Units
Sample Description:	approx 100' downstream from middle dredge po	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	143 uMHO
Project Site No.:	2A	Temperature:	27.03
Station No.:	Dredge Plume	Dissolved Oxygen:	7.04 mg/L
Date/Time Collected:	07/16/2009 11:08	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:	08/01/2009		
Date/Time Received:	07/16/2009 14:12		
Received By:	Ken Hitchman		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002618004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA ash spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 07/16/2009 11:18
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.54 pH Units
Chlorine, residual:
Conductivity: 137 uMHO
Temperature: 26.98
Dissolved Oxygen: 7.02 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	190	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	220	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	6.3	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	56	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.39J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	1.6	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.48J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	74	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.4	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.32J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	2.4J	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number: K00002618004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA ash spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 07/16/2009 11:18
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.54 pH Units
Chlorine, residual:
Conductivity: 137 uMHO
Temperature: 26.98
Dissolved Oxygen: 7.02 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1					
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE	
Mercury	U	µg/L	0.029	0.2	A Wilson	7/21/2009	

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002618005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA ash spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 07/16/2009 11:29
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 8.58 pH Units
Chlorine, residual:
Conductivity: 239 uMHO
Temperature: 26.89
Dissolved Oxygen: 10.49 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	270	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	260	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	4.3J	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	56	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.62J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	2.1	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.72J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	100	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	2.0	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.23J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	3.7J	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	2.6J	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number: K00002618005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA ash spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 07/16/2009 11:29
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 8.58 pH Units
Chlorine, residual:
Conductivity: 239 uMHO
Temperature: 26.89
Dissolved Oxygen: 10.49 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002618006
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA ash spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 07/16/2009 11:40
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations

pH: 8.76 pH Units
Chlorine, residual:
Conductivity: 253 uMHO
Temperature: 26.90
Dissolved Oxygen: 11.47 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	250	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	230	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	5.7	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	U	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.47J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	1.7	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.56J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	110	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.7	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.17J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number: K00002618006
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA ash spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 07/16/2009 11:40
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations

pH: 8.76 pH Units
Chlorine, residual:
Conductivity: 253 uMHO
Temperature: 26.90
Dissolved Oxygen: 11.47 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002618007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA ash spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 07/16/2009 11:54
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 8.39 pH Units
Chlorine, residual:
Conductivity: 263 uMHO
Temperature: 27.22
Dissolved Oxygen: 9.61 mg/L
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	80	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	150	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	6.4	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	56	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.27J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	4.4	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.29J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	45	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.4	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.17J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	3.9J	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	2.3J	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number: K00002618007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA ash spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 07/16/2009 11:54
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 8.39 pH Units
Chlorine, residual:
Conductivity: 263 uMHO
Temperature: 27.22
Dissolved Oxygen: 9.61 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.045J	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002618008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA ash spill
Project Site No.: 5A
Station No.: KingAshOutFf2
Date/Time Collected: 07/16/2009 12:01
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.91 pH Units
Chlorine, residual:
Conductivity: 242 uMHO
Temperature: 27.23
Dissolved Oxygen: 7.48 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	210	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	260	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	0.38J	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	7.8	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	60	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.45J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	6.2	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.66J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	78	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.6	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.16J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	4.3J	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	4.2J	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number: K00002618008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA ash spill
Project Site No.: 5A
Station No.: KingAshOutFf2
Date/Time Collected: 07/16/2009 12:01
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date: 08/01/2009
Date/Time Received: 07/16/2009 14:12
Received By: Ken Hitchman

Field Determinations
pH: 7.91 pH Units
Chlorine, residual:
Conductivity: 242 uMHO
Temperature: 27.23
Dissolved Oxygen: 7.48 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.038J	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number:	K00002618009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	8.36 pH Units
Sample Description:	Cilnch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	264 uMHO
Project Site No.:	6	Temperature:	26.70
Station No.:	CLINC004.5RO	Dissolved Oxygen:	9.51 mg/L
Date/Time Collected:	07/16/2009 12:13	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:	08/01/2009		
Date/Time Received:	07/16/2009 14:12		
Received By:	Ken Hitchman		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/20/2009				W Frye	7/20/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	94	µg/L	2.9	10	S Ufegbu	7/31/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	150	µg/L	6.4	10	M Pattanayek	7/24/2009
Antimony	0.73J	µg/L	0.33	1	M Pattanayek	7/24/2009
Arsenic	4.6J	µg/L	0.93	5	M Pattanayek	7/29/2009
Barium	51	µg/L	2.5	5	M Pattanayek	7/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	7/24/2009
Cobalt	0.32J	µg/L	0.04	1	M Pattanayek	7/24/2009
Copper	5.6	µg/L	0.38	1	M Pattanayek	7/24/2009
Lead	0.38J	µg/L	0.10	1	M Pattanayek	7/24/2009
Manganese	42	µg/L	0.42	1	M Pattanayek	7/24/2009
Nickel	1.5	µg/L	0.25	1	M Pattanayek	7/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/24/2009
Silver	0.083J	µg/L	0.03	0.25	M Pattanayek	7/24/2009
Thallium	0.62J	µg/L	0.03	1	M Pattanayek	7/24/2009
Vanadium	6.6	µg/L	3.4	5	M Pattanayek	7/30/2009
Zinc	3.0J	µg/L	1.9	5	M Pattanayek	7/24/2009

Lab-Sample Number:	K00002618009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	8.36 pH Units
Sample Description:	Cilinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	264 uMHO
Project Site No.:	6	Temperature:	26.70
Station No.:	CLINC004.5RO	Dissolved Oxygen:	9.51 mg/L
Date/Time Collected:	07/16/2009 12:13	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:	08/01/2009		
Date/Time Received:	07/16/2009 14:12		
Received By:	Ken Hitchman		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Mercury	0.086J	µg/L	0.029	0.2	A Wilson	7/21/2009

J - Estimated value between MDL and MLQ
 MDL - Method Detection Limit
 MLQ - Method Quantitation Limit
 U - Undetected